UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/041,761	01/10/2002	Bum-Sik Yoon	1293.1182	3182

49455 7590 12/19/2006	EXAMINER
STEIN, MCEWEN & BUI, LLP	DANG, HUNG Q
1400 EYE STREET, NW	

ART UNIT	PAPER NUMBER
2621	

SUITE 300
WASHINGTON, DC 20005

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/19/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/041,761	YOON ET AL.
	Examiner	Art Unit	
	Hung Q. Dang	2621	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on <u>07 November 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-33</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-33</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>10 January 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed on 11/07/2006 have been fully considered but they are not persuasive.

In pages 10-11, applicant argues, with respect to current independent claims 1, 6, 15, 29, and 33, that Ando et al. fail to disclose or teach the limitation of "wherein each of the SOBUs, excluding a last SOBU, includes at least two entire ATSs" because Ando et al., while disclosing each of SOBUs to have at least two entire ATSs, fail to suggest the last SOBU does not fall into that condition. Applicant further states that claims 1, 6, 15, 29, and 33 and the claims that depend from claims 1, 6, 15, 29, and 33 are allowable.

In response, the examiner respectfully disagrees. Using claim 1 as an example, as recognized by applicant, Ando et al. disclose each of the SOBUs includes at least two entire ATSs. Since the claim only recites "excluding the last SOBU" and fails to further specify the condition of the last SOBU, the number of ATSs in the last SOBU is irrelevant because it is excluded from the condition of having two ATSs as stated above. Hence, Ando et al. fully disclose the limitation of "wherein each of the SOBUs, excluding a last SOBU, includes at least two entire ATSs".

In pages 11-12, applicant argues, with respect to current independent claim 20, that Ando et al. fail to disclose the limitations of "a SOBU generating unit which inserts a stuffing packet for correction having a predetermined ATS which has a value that is the same as an ATS among ATSs included in a SOBU located immediately before one of

the SOBUs having no corresponding ATS". The applicant also argues that claim 20 and claims 21-26 are believed to be allowable.

In response, the examiner respectfully disagrees. As recognized by applicant, Ando et al. disclose that the stuffing packet is used to maintain the predetermined length of a stream pack. With that being said, the stuffing is used to correct the length of a stream pack. Furthermore, Ando et al. disclose for an SOBU that does not include any actual application packet, or does not include any ATS, the ATS of the stuffing packet is determined in accordance with the contents of time map information (column 36, lines 52-54). The time map information 252 in Fig. 5a contains stream block time difference as shown in Fig. 5(b) (column 11, lines 41-44) which is the duration of the SOBU. Having said that, the ATS of the stuffing packet in the SOBU which has no corresponding ATS must have the same value as that of the ATS of the last packet immediately before it. For example, Fig. 5(c) shows data of two SOBUs. If the second SOBU has no corresponding ATS, the [Time Stamp p] must be set to the value of the ATS of the Transport Packet d of the first SOBU to maintain the correct value of duration of the first SOBU. Hence Ando et al. fully disclose the limitation of "a SOBU generating unit which inserts a stuffing packet for correction having a predetermined ATS which has a value that is the same as an ATS among ATSs included in a SOBU located immediately before one of the SOBUs having no corresponding ATS".

In page12, applicant argues, with respect to current independent claim 27, that Ando et al. fails to disclose the limitation of "...a last one of the SOBUs ... has no corresponding ATS." Hence, claim 27 and its dependent claim 28 are allowable.

In response, the examiner respectfully disagrees. Ando et al. disclose all SOBUs,

which have no corresponding ATS, have a virtual ATS as described above. With this

being said, the last SOBU which has no corresponding ATS, also has a virtual ATS.

Hence the limitation of "a control unit to generate a mapping list as search information

by regarding a last one of the SOBUs which has no corresponding ATS as having a

virtual ATS" is fully disclosed by Ando et al.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Ando et

al. (U.S. Patent 6,373,803), which has an effective priority date of parent U.S.

application No. 09/660,556 filed on September 12th, 2000, which fully supports the

claimed invention.

Claim 1 recites a recording medium on which content stream data is recorded,

comprising: (1) A Stream Object (SOB) formed with Stream Object Units (SOBUs)

which has a predetermined size and one or more stream packs; (2) each of the stream

packs having an Application Time Stamp (ATS) indicating reproducing time information and an application packet in which content stream data is packed; wherein each of the SOBUs, excluding the last SOBU, includes at least two entire ATS.

Ando et al. anticipate a stream data generation method; hence, a recording medium on which the stream data is recorded, comprising: (1) A Stream Object (SOB) formed with Stream Object Units (SOBUs) (Figs. 1e-1g, column 11, lines 19-20) which has a predetermined size (column 7, lines 36-38; column 10, lines 61-67) and one or more sectors, which correspond to stream packs (column 4, lines 16-18; column 7, lines 34-35, 39); (2) each of the stream packs having one or more transport packet/application packet (column 4, lines 14-16) having an Application Time Stamp (ATS) indicating reproducing time information (column 4, lines 19-20) and an application packet in which content stream data is packed (column 4, lines 14-16); wherein each of the SOBUs (stream blocks), excluding the last SOBU (stream blocks), includes at least two entire ATS (column 17, lines 5-8; column 20, lines 57-59).

Claim 6 recites a recording medium on which content stream data is recorded, comprising: (1) A Stream Object (SOB) formed with Stream Object Units (SOBUs) which has a predetermined size and one or more stream packs; (2) each of the stream packs having an Application Time Stamp (ATS) indicating reproducing time information and an application packet in which content stream data is packed; wherein each of the SOBUs, excluding the last SOBU and SOBUs having stuffing packets, includes at least two entire ATS; and each of the remaining SOBUs having stuffing packets for correction include a predetermined ATS.

Ando et al. anticipate a stream data generation method; hence, a recording

medium on which the stream data is recorded, comprising: (1) A Stream Object (SOB)

formed with Stream Object Units (SOBUs) (Figs. 1e-1g, column 11, lines 19-20) which

has a predetermined size (column 7, lines 36-38; column 10, lines 61-67) and one or

more sectors, which correspond to stream packs (column 4, lines 16-18; column 7, lines

34-35, 39); (2) each of the stream packs having one or more transport

packet/application packet (column 4, lines 14-16) having an Application Time Stamp

(ATS) indicating reproducing time information (column 4, lines 19-20) and an application

packet in which content stream data is packed (column 4, lines 14-16); wherein each of

the SOBUs (stream blocks), excluding the last SOBU (stream blocks) and SOBUs

(stream blocks) having stuffing packets, includes at least two entire ATS (column 17,

lines 5-8; column 20, lines 57-59); and each of the remaining SOBUs having stuffing

packets for correction include a predetermined ATS (column 36, lines 49-54).

Claim 15 recites a recording apparatus to record content stream data as a

Stream Object (SOB) formed with at least one Stream Object Unit (SOBU) having a

predetermined size and one or more stream packs, each of the stream packs having an

Application Time Stamp indicating reproducing time information and an application

packet in which content stream data is packed, the recording apparatus comprising: (1)

a control unit that generates a mapping list as search information; (2) a clock generation

unit that generates a clock value; (3) a buffer unit that attaches the clock value provided

from said clock generating unit to received content stream data, and outputs the

received content stream data by buffering the content stream data; (4) a stream object

unit (SOBU) generating unit which packs the received content stream data output from

said buffer unit and generates SOBUS so that each of the SOBUS, excluding a last

SOBU, contains at least two entire Application Time Stamps (ATS); (5) and a recording

unit which records the SOBUS generated by said SOBU generating unit and the

mapping list generated by said control unit.

Ando et al. anticipate a recording apparatus (column 13, lines 24-26) to record

content stream data as a Stream Object (SOB) formed with at least one Stream Object

Unit (SOBU) (Figs. 1e-1g, column 11, lines 19-20) having a predetermined size (column

7, lines 36-38; column 10, lines 61-67) and one or more stream packs (column 4, lines

16-18; column 7, lines 34-35, 39), each of the stream packs having one or more

transport packet/application packet (column 4, lines 14-16) having an Application Time

Stamp indicating reproducing time information (column 4, lines 19-20) and an

application packet in which content stream data is packed (column 4, lines 14-16), the

recording apparatus comprising: (1) a control unit (main MPU) that generates a SOBI,

which contains a mapping list as search information (column 10, lines 35-38; column 26,

lines 38-41); (2) a clock generation unit that generates a clock value (column 20, lines

46-48; column 24, lines 1-8); (3) a buffer unit that attaches the clock value provided

from said clock generating unit to received content stream data, and outputs the

received content stream data by buffering the content stream data (column 20, lines 46-

51); (4) a formatter, which is the stream object unit (SOBU) generating unit which packs

the received content stream data output from said buffer unit and generates SOBUs

(column 14, lines 57-62) so that each of the SOBUs, excluding a last SOBU, contains at

least two entire Application Time Stamps (ATS) (column 17, lines 5-8; column 20, lines 57-59); (5) and a recording unit which records the SOBUs generated by said SOBU generating unit and the mapping list generated by said control unit (column 14, lines 63-67; column 15, lines 1-11, column 21, lines 60-65).

Claim 20 recites a recording apparatus for recording content stream data as a Stream Object (SOB) formed with at least one Stream Object Unit (SOBU) having a predetermined size, the recording apparatus comprising: (1) a control unit that generates a mapping list as search information; (2) a clock generation unit that generates a clock value; (3) a buffer unit attaching the clock value provided from said clock generating unit to received content stream data, and outputting the received content stream data by buffering the content stream data; (4) a stream object unit (SOBU) generating unit which inserts a stuffing packet for correction having a predetermined Application Time Stamp (ATS) which has a value the same as an ATS among ATSs included in an SOBU located immediately before one of the SOBUs having no corresponding ATS; and (5) a recording unit which records the SOBUs generated by said SOBU generating unit and the mapping list generated by said control unit.

Ando et al. anticipate a recording apparatus for recording content stream data as a Stream Object (SOB) formed with at least one Stream Object Unit (SOBU) (Figs. 1e-1g, column 11, lines 19-20) having a predetermined size (column 7, lines 36-38; column 10, lines 61-67), the recording apparatus comprising: (1) a control unit (main MPU) that generates a SOBI, which contains a mapping list as search information (column 10,

lines 35-38; column 26, lines 38-41); (2) a clock generation unit that generates a clock

value (column 20, lines 46-48; column 24, lines 1-8); (3) a buffer unit attaching the clock

value provided from said clock generating unit to received content stream data, and

outputting the received content stream data by buffering the content stream data

(column 20, lines 46-51); (4) a formatter, which is stream object unit (SOBU) generating

unit (column 14, lines 57-62), which inserts a stuffing packet for correction (column 34,

lines 9-10, lines 24-26) having a predetermined Application Time Stamp (ATS) (column

36, lines 49-54) which has a value as determined by the contents of the time map

information (column 36, lines 52-54), which records the duration of the SOBU (column

11, lines 41-44); hence said ATS having the same value as an ATS among ATSs

included in an SOBU located immediately before one of the SOBUs having no

corresponding ATS to maintain the duration of the SOBU before the SOBU having no

corresponding ATS ; and (5) a recording unit which records the SOBUs generated by

said SOBU generating unit and the mapping list generated by said control unit (column

14, lines 63-67; column 15, lines 1-11, column 21, lines 60-65).

Claim 27 recites a recording apparatus to record an Stream Object (SOB) having

one or more Stream Object Units (SOBUs), each of the SOBUS has one or more

stream packs arrayed in a row and divided into units of a predetermined size and

sequentially assigned, each of the stream packs having an Application Time Stamp

(ATS) and an application packet in which content stream data is packed, the recording

apparatus comprising: (1) a clock generation unit to generate a clock value; (2) a buffer

unit to attach the clock value provided from said clock generating unit to received

content stream data, and to output the received content stream data; (3) a stream object

unit (SOBU) generating unit to generate SOBUS by packing the received content

stream data output from said buffer unit; (4) a control unit to generate a mapping list as

search information by regarding a last one of the SOBUS which has no corresponding

ATS as having a virtual ATS; and (5) a recording unit to record the SOBUS generated

by said SOBU generating unit and the mapping list generated by said control unit.

Ando et al. anticipate a recording apparatus (column 13, lines 24-26) to record an

Stream Object (SOB) having one or more Stream Object Units (SOBUs), each of the

SOBUS has one or more stream packs arrayed in a row and divided into units of a

predetermined size and sequentially assigned (fig. 1; column 4, lines 16-18; column 7,

lines 34-35, 39), each of the stream packs having an Application Time Stamp (ATS)

(column 4, lines 19-20) and an application packet in which content stream data is

packed (column 4, lines 14-16), the recording apparatus comprising: (1) a clock

generation unit to generate a clock value (column 20, lines 46-48; column 24, lines 1-8);

(2) a buffer unit to attach the clock value provided from said clock generating unit to

received content stream data, and to output the received content stream data (column

20, lines 46-51); (3) a formatter, which is a stream object unit (SOBU) generating unit to

generate SOBUs by packing the received content stream data output from said buffer

unit (column 14, lines 57-62); (4) a main MPU, which is the control unit; to generate a

SOBI, which contains a mapping list as search information (column 10, lines 35-38;

column 26, lines 38-41) by regarding a last one of the SOBUs which has no

corresponding ATS as having a virtual ATS (column 36, lines 48-54); and (5) a

recording unit to record the SOBUS generated by said SOBU generating unit and the

mapping list generated by said control unit (column 14, lines 63-67; column 15, lines 1-

11, column 21, lines 60-65).

Claim 28 recites the control unit generating a mapping list (column 26, lines 46-

56) having an incremental application packet arrival time (IAPAT) obtained by regarding

a last application packet included in the SOB as having a virtual ATS.

Ando et al. anticipate the control unit generating a mapping list having an

incremental application packet arrival time (IAPAT) (column 11, lines 36-43, fig. 5;

column 22, lines 4-8) obtained by regarding a last application packet included in the

SOB as having a virtual ATS (column 36, lines 29-35, lines 48-54).

Claim 29 recites a reproducing apparatus to reproduce content stream data from

a recording medium on which content stream data is recorded as an Stream Object

(SOB) formed with at least one Stream Object Unit (SOBU) having a predetermined

size and one or more stream packs, each of the stream packs having an Application

Time Stamp (ATS) indicating reproducing time information and an application packet in

which content stream data is packed, each of the SOBUS, excluding a last SOBU and

SOBUS having stuffing packets, includes at least two entire ATSs, the reproducing

apparatus comprising: a reading unit to read a mapping list as search information and a

corresponding SOBU, where the mapping list has search information generated by

regarding the last SOBU as an SOBU having a virtual ATS; a control unit to control the

reading unit to read the corresponding SOBU, referring to the mapping list read by the

reading unit; a clock generating unit to generate a clock value; an SOBU analyzing unit

to extract content stream data by analyzing the SOBU read by said reading unit; and a

buffering unit to output the content stream data from the SOBU analyzing unit by

buffering the content stream data based on a clock value provided by said clock

generating unit.

Ando et al. anticipate a reproducing apparatus (column 13, lines 24-26) to

reproduce content stream data from a recording medium on which content stream data

is recorded as an Stream Object (SOB) formed with at least one Stream Object Unit

(SOBU) having a predetermined size and one or more stream packs (column 4, lines

16-18; column 7, lines 34-35, 39), each of the stream packs having an Application Time

Stamp (ATS) indicating reproducing time information (column 4, lines 19-20) and an

application packet in which content stream data is packed (column 4, lines 14-16), each

of the SOBUs, excluding a last SOBU and SOBUS having stuffing packets, includes at

least two entire ATSs (column 17, lines 5-8; column 20, lines 57-59), the reproducing

apparatus comprising: (1) a stream data playback controller, which is a reading unit, to

read a mapping list as search information and a corresponding SOBU, where the

mapping list has search information (column 22, lines 33-37; 44-56) generated by

regarding the last SOBU as an SOBU having a virtual ATS (column 36, lines 29-35,

lines 48-54); (2) a main MPU, which is a control unit, to control the reading unit to read

the corresponding SOBU, referring to the mapping list read by the reading unit (column

22, lines 33-41); (3) a clock generating unit to generate a clock value (column 20, lines

46-48; column 24, lines 1-8); (4) an separator, which is a SOBU analyzing unit, to

extract content stream data by analyzing the SOBU read by said reading unit (column

23, lines 23-29); and (5) a buffering unit to output the content stream data from the

SOBU analyzing unit by buffering the content stream data based on a clock value

provided by said clock generating unit (column 20, lines 46-51).

Claim 21 recites all SOBUs, excluding a last SOBU, have at least two entire

ATSs, which is anticipated by Ando et al. (column 17, lines 5-8; column 20, lines 57-59).

Claim 22 recites said SOBU generating unit including a stuffing packet for

correction in the last SOBU, which is anticipated by Ando et al. (column 20, lines 60-62).

Claims 7 and 23 recite the stuffing packets for correction are recorded

continuously after a last application packet included in the SOB, which is clearly

anticipated by Ando et al. (column 34, lines 25-26).

Claim 8 and 24 recite the predetermined ATS included in the stuffing packet for

correction has the same value as an ATS included in the last stream pack, which is

anticipated by Ando et al. (column 36, lines 49-51).

Claims 9, 25 and 10, 26 recite the stuffing packet for correction further includes a

payload in which predetermined data is recorded or no data is recorded, and a "0" is

recorded respectively, which is anticipated by Ando et al. (column 36, lines 23-26).

Claims 2, 11, and 16 recite the size of the application packet is small enough so

that the SOBUs, excluding the last SOBU, includes at least two entire ATS, which is

clearly anticipated by Ando et al. (column 17, lines 5-8; column 20, lines 57-59).

Claim 3, 12, 17 and 4, 13, 18 recite the size of the application packet satisfies the

equation: $AP\_PKT\_SZ \leq SPayload\_SZ \times \{SOBU\_SZ/2\} - \{cell((N\_AHE + N\_SByte)/2) + ATS\_SZ\}$; and

AP_PKT_SZ $\leq$ 2018 x {SOBU_SZ} – 6, respectively

where AP_PKT_SZ denotes the size of the application packet, ATS_SZ denotes

a size of an ATS which is formed in units of bytes, SOBU_SZ denotes a size of an

SOBU, SPayload_SZ denotes a size of a data space containing information excluding a

fixed header area of a stream pack, N_AHE denotes a number of application header

extensions of a corresponding SOBU, and N_SByte denotes a number of stuffing bytes

of a corresponding SOBU.

Ando et al. anticipate the size of a stream pack or sector being 2048 bytes (Fig.

26; column 17, line 5) and each of the data area, after various header sizes are

subtracted, can record approximately 10 transport packets (or application packets)

(column 17, lines 5-8), each of which having an application time stamp (ATS) at its head

position (column 33, lines 65-67). Based on this anticipation, the following condition is

established:

10 x (AP_PKT_SIZE + ATS) $\leq$ 2027, or equivalent

AP_PKT_SZ $\leq$ 2027 – 10 ATS.

Under this observation, the claimed range obviously overlap the range disclosed

by Ando et al., thus is anticipated (MPEP 2131.03).

Claims 5, 14, 19, and 30 recite a MAPping List (MAPL) having an Incremental

Application Packet Arrival Time (IAPAT) indicating a duration of the corresponding

SOBU as search information indicating which of the SOBUs are included in a

corresponding SOB.

Ando et al. anticipate a MAPping List (MAPL) (column 26, lines 46-56) having an Incremental Application Packet Arrival Time (IAPAT) indicating a duration of the corresponding SOBU (column 11, lines 36-43, fig. 5; column 22, lines 4-8) as search information indicating which of the SOBUs are included in a corresponding SOB (column 22, lines 42-56).

Claim 31 recites the predetermined ATS included in the stuffing packet for correction has the same value as an ATS included in the last stream pack of the SOBUs, which is anticipated by Ando et al. (column 36, lines 49-51).

Claim 32 recites the stuffing packet for correction further includes a payload in which predetermined data is recorded or no data is recorded, which is anticipated by Ando et al. (column 36, lines 23-26).

Claim 33 recites an apparatus comprising: (1) a recording apparatus to record a stream object formed with at least one stream object units (SOBUS) in which content stream data having one or more stream packs are recorded, each of the stream packs including an application packet having an application time stamp and the content stream data packed therein, said recording apparatus including: (1) a recording control unit to generate a mapping list as search information; (2) a clock generation unit to generate a clock value; (3) a buffer unit to buffer input content stream data, to add the clock value provided by the clock generation unit to the input content stream data, and to output a result; (4) a Stream Object Unit (SOBU) generating unit to generate the SOBUs, each of the SOBUs, excluding a last one of the SOBUs and SOBUs having stuffing packets, includes at least two entire ATSs; and (5) a recording unit to record the plurality of

generated SOBUS and the mapping list on a recordable recording medium, and (6) a

reproducing apparatus to reproduce data from a reproduceable recording medium, the

reproducing apparatus including: (i) a reading unit to read the mapping list as search

information; and (ii) a reproducing control unit to search for a corresponding SOBU by

referring to a generated search information and regarding a value of the predetermined

application time stamp as the value of an application time stamp for the last one of the

SOBUS in the stream object when referring to the read mapping list.

Ando et al. anticipate an apparatus comprising: (1) a recording apparatus

(column 13, lines 24-26) to record a stream object formed with at least one stream

object units (SOBUs) (Figs. 1e-1g; column 11, lines 19-20) in which content stream data

having one or more stream packs are recorded (column 4, lines 16-18; column 7, lines

34-35, 39), each of the stream packs including an application packet (column 4, lines

14-16) having an application time stamp (column 4, lines 19-20) and the content stream

data packed therein (column 4, lines 14-16), said recording apparatus including: (1) a

recording control unit to generate a mapping list as search information (column 10, lines

35-38; column 26, lines 38-41); (2) a clock generation unit to generate a clock value

(column 20, lines 46-48; column 24, lines 1-8); (3) a buffer unit to buffer input content

stream data, to add the clock value provided by the clock generation unit to the input

content stream data, and to output a result (column 20, lines 46-51); (4) a formatter,

which is a Stream Object Unit (SOBU), generating unit to generate the SOBUs (column

14, lines 57-62), each of the SOBUs, excluding a last one of the SOBUs and SOBUs

having stuffing packets, includes at least two entire ATSs (column 17, lines 5-8; column

20, lines 57-59); and (5) a recording unit to record the plurality of generated SOBUS

and the mapping list on a recordable recording medium (column 14, lines 63-67; column

15, lines 1-11; column 21, lines 60-65), and (6) a reproducing apparatus (column 13,

lines 24-26) to reproduce data from a reproduceable recording medium, the reproducing

apparatus including: (i) a stream data playback controller, which is a reading unit, to

read the mapping list as search information (column 22, lines 33-37, 44-56); and (ii) a

reproducing control unit to search for a corresponding SOBU by referring to a generated

search information (column 22, lines 33-56) and regarding a value of the predetermined

application time stamp as the value of an application time stamp for the last one of the

SOBUs in the stream object when referring to the read mapping list (column 36, lines

48-54).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

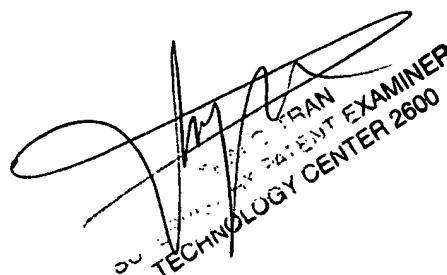than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Hung Q. Dang whose telephone number is 571-270-

1116. The examiner can normally be reached on M-Th:7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hung Dang
Patent Examiner